

WHAT IS CLAIMED IS:

1. A re-locatable operator station assembly for use to operate a machine, comprising: linkage that keeps the X and Y axis of the operating station assembly the same as the X and Y axis of the vehicle, regardless of where the operator station assembly is positioned.
2. A system comprising:
 - a machine defining a first x, y, and z coordinate system; and
 - a controller distanced from but coupled to the machine by a linkage, the controller controlling positioning of the machine, the controller defining a second x, y, and z coordinate system; and
 - wherein the linkage allows the controller to be positioned relative to the machine while maintaining the x axis of the machine parallel to the x axis of the controller and the y axis of the machine parallel to the y axis of the controller.
3. A system as set forth in claim 1, wherein the machine is an omni-directional machine and the linkage is a mechanical linkage.
4. A re-locatable operator station assembly for use in operating a machine, comprising:
 - a first linkage assembly comprising first and second links configured to be rotateably coupled to the machine via first and second pivots;
 - a first intermediate bracket comprising third, fourth, fifth and sixth pivots and rotateably coupled to the first linkage assembly via the third and fourth pivots;
 - a second linkage assembly comprising third and fourth links and coupled to the first intermediate bracket via the fifth and sixth pivots; and
 - an operator station comprising a housing and a man-machine interface and coupled to the second linkage assembly via seventh and eighth pivots.
5. A re-locatable operator station assembly according to claim 3, wherein the operator station is coupled to the second linkage assembly by a second bracket, the second bracket comprising pivots rotateably coupled to the third and fourth links.
6. A re-locatable operator station assembly according to claim 4, further comprising a third linkage assembly comprising fifth and sixth links and a third bracket comprising

seventh, eighth, ninth and tenth pivots, wherein the first and second links of the first linkage assembly are rotateably coupled to the third bracket by the seventh and eighth pivots respectively, the fifth and sixth links of the third linkage assembly are rotateably coupled to the third bracket by the ninth and tenth pivots respectively, and the ninth and tenth links are configured to be rotateably coupled to the machine.

7. A re-locatable operator station assembly according to claim 3, wherein:

the first and second pivots are separated by a distance that is approximately equal to a distance separating the third and fourth pivots;

the fifth and sixth pivots are separated by a distance that is approximately equal to a distance separating the seventh and eighth pivots,

the first and second links are of approximately equal lengths, and

the third and fourth links are of approximately equal lengths.

8. A re-locatable operator station assembly according to claim 3, wherein the first linkage assembly is oriented substantially horizontally and the fifth and sixth pivots are oriented such that the second linkage assembly may be positioned in a non-horizontal orientation when rotated about the fifth and sixth pivots.

9. A re-locatable operator station assembly according to claim 3, wherein the operator station comprises an electrical cable capable of electronically coupling the operator station to the machine.

10. A re-locatable operator station assembly according to claim 3, wherein the operator station comprises a wireless link capable of passing information between the operator station and the machine.

11. A re-locatable operator station assembly according to claim 5, further comprising a seventh link coupled between the third and fourth links so as to prevent rotation of the second linkage assembly with respect to the first bracket, the seventh link comprising a first member and a second member coupled together so as to permit that the seventh link to have a variable length, and a locking mechanism capable of locking the positions of the first and second members so as to fix the length of the seventh link.

12. A re-locatable operator station assembly according to claim 5, further comprising a fourth bracket comprising the first and second pivot, the fourth bracket being capable of coupling the third linkage assembly to the machine.

13. A re-locatable operator station assembly according to claim 3, wherein the pivots further comprise a friction element capable of resisting rotation when subjected to a rotational force below a threshold and permitting rotation when subjected to a rotational force at or above a threshold.

14. A machine, comprising:

- a chassis;

- a wheel rotateably mounted to said chassis, the wheel being selected from the group of pneumatic, solid rubber, solid urethane, and omni directional;

- mission hardware coupled to the chassis, the mission hardware being selected from the group of lifting machinery, scissors lift, aerial work platform, aircraft engine and handling machinery, and long load support; and

- a re-locatable operator station assembly for use in operating the vehicle, comprising:

- a first linkage assembly comprising first and second links configured to be rotateably coupled to the vehicle via first and second pivots;

- a first intermediate bracket comprising third, fourth, fifth and sixth pivots and rotateably coupled to the first linkage assembly via the third and fourth pivot;

- a second linkage assembly comprising third and fourth links and coupled to the first intermediate bracket via the fifth and sixth pivots; and

- an operator station comprising a housing and a man-machine interface and coupled to the second linkage assembly via seventh and eighth pivots.

15. A re-locatable operator station assembly according to claim 3, wherein the operator station is coupled to the second linkage assembly by a second bracket, the second bracket comprising the fifth and sixth pivots rotateably coupled to the third and fourth links, respectively.

16. A re-locatable operator station assembly according to claim 4, further comprising a third linkage assembly comprising fifth and sixth links and a third bracket comprising

seventh, eighth, ninth and tenth pivots, wherein the first and second links of the first linkage assembly are rotateably coupled to the third bracket by the seventh and eighth pivots respectively, the fifth and sixth links of the third linkage assembly are rotateably coupled to the third bracket by the ninth and tenth pivots respectively, and the ninth and tenth links are configured to be rotateably coupled to the machine.

17. A re-locatable operator station assembly according to claim 3, wherein:

the first and second pivots are separated by a distance that is approximately equal to a distance separating the third and fourth pivots;

the fifth and sixth pivots are separated by a distance that is approximately equal to a distance separating the seventh and eighth pivots,

the first and second links are of approximately equal lengths, and

the third and fourth links are of approximately equal lengths.

18. A re-locatable operator station assembly according to claim 3, wherein the first linkage assembly is oriented substantially horizontally and the fifth and sixth pivots are oriented such that the second linkage assembly may be positioned in a non-horizontal orientation when rotated about the fifth and sixth pivots.

19. A re-locatable operator station assembly according to claim 3, wherein the operator station comprises an electrical cable capable of electronically coupling the operator station to the machine.

20. A re-locatable operator station assembly according to claim 3, wherein the operator station comprises a wireless link capable of passing information between the operator station and the machine.

21. A re-locatable operator station assembly according to claim 5, further comprising a seventh link coupled between the third and fourth links so as to prevent rotation of the second linkage assembly with respect to the first bracket, the seventh link comprising a first member and a second member coupled together so as to permit that the seventh link to have a variable length, and a locking mechanism capable of locking the positions of the first and second members so as to fix the length of the seventh link.

22. A re-locatable operator station assembly according to claim 5, further comprising a fourth bracket comprising the first and second pivot, the fourth bracket being capable of coupling the third linkage assembly to the machine.

23. A re-locatable operator station assembly according to claim 3, wherein the pivots further comprise a friction element capable of resisting rotation when subjected to a rotational force below a threshold and permitting rotation when subjected to a rotational force at or above a threshold.

24. A re-locatable operator station assembly for use in operating a machine, comprising:

- an operator control station comprising a housing and means for controlling the machine;

- a means for positioning the operator control station within a range of horizontal and vertical positions with respect to the machine; and

- a means for coupling the positioning means to the machine.

25. A re-locatable operator station assembly according to claim 23, further comprising a means for rotating the operator control station to maintain an ergonomically desirable orientation to an operator depending upon a vertical position of the operator control station.

26. A re-locatable operator station assembly according to claim 24, further comprising a means for adjustably fixing the vertical position of the operator control station.